

The aim of production is to satisfy the wants of people. There are three main types of productive industries.

- 1 **Primary industries** include those firms who produce natural resources, for example – mining.
- 2 **Secondary industries** use raw materials to produce other goods. These industries are known as manufacturing industries.
- 3 **Tertiary industries** provide services.

Industries today are organized so that workers and firms specialize in the production of those goods and services at which they are best. High levels of output achieved by specialization are the result of this **division of labour** into separate tasks. One feature of production is the law of **diminishing returns**. This states that if one factor of production is fixed in supply, for example, land or capital, and extra units of another factor, for example, labour, are added to it, then the extra output or returns gained from the employment of each worker must after a time fall.

An entrepreneur's decision to produce will depend upon profits, profits being revenue received minus total costs. Total costs include variable costs, such as wages and raw materials, which depend upon the level of output, and fixed costs, like the rent of factory space. The **optimum level of output** of production or best level will be where the average cost of production is lowest.

When a firm increases its scale of production or employs more factors of production, average costs of production may fall. We say that the firm experiences **economies of scale** if it experiences cost savings from increasing the scale of production. Large-scale production can bring such benefits as the ability to buy in bulk, the use of specialized staff and machinery, low interest rate loans. However, if a firm grows too large, it may experience **diseconomies of scale**, or increases in cost, from increasing the scale of production.

Despite the advantages of large-scale production many firms remain small, preferring to offer personal service and to cater for local markets and individual needs.

### **MULTIPLE CHOICE**

- 1 Which of the following would be regarded as secondary production?
  - A Insurance
  - B Coal-mining
  - C Farming
  - D Engineering
  - E Entertaining
- 2 One advantage of the division of labour is:
  - A Work becomes boring.
  - B More goods and services are produced.
  - C More training is needed.
  - D People become too interdependent.
  - E Products become standardized.

(continued)

In economics the short run refers to a period of time when:

- A All factors of production can be changed.
- B Land is fixed in supply.
- C Capital is a variable factor.
- D Labour is a variable factor.
- E No more of any of the factors of production can be employed.

The following reasons can help explain why small firms can survive and flourish in the economy, *except*:

- A Government schemes to aid small businesses.
- B Local monopoly power.
- C Small firms can change production techniques quickly.
- D Lack of finance.
- E Personalized service.

In the production of which of the following commodities are we likely to find the division of labour extensively applied?

- A Portrait painting
- B Disposable razors
- C Made-to-measure suits
- D Craft pottery
- E Hairdressing

6 The marginal product of the fifth worker employed is:

- A 100
- B 500
- C 40
- D 425
- E 75

7 Diminishing returns to labour are experienced after the employment of worker number:

- A 2
- B 3
- C 4
- D 5
- E 6

8 Which of the following are fixed costs?

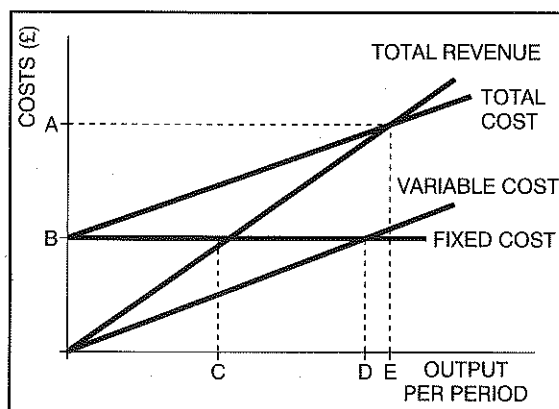
- 1 Heating bills
- 2 Bank loan repayments
- 3 Wages
- 4 Electricity to run machines
- 5 Machine hire

- A 5 only
- B 3 and 5 only
- C 1, 2 and 5
- D 1, 2 and 4
- E All of them

9 On the graph, what level of output represents the break-even point of production?

Questions 6–7 relate to the table of figures below which shows the total output of radios for different numbers of workers employed.

Number of workers employed	Number radios produced per week
1	100
2	210
3	325
4	425
5	500
6	540



(continued)

Questions 10 to 13 relate to the following table of costs:

Total output of compact discs	Total costs
0	£100
100	£800
200	£1500
300	£2200
400	£2900
500	£3600
600	£4300

10 The average cost of producing 200 compact discs is:

- A £7
- B £70
- C £7.50
- D £1500
- E £100

11 The fixed costs of production are:

- A £1
- B £10
- C £100
- D £800
- E £1000

12 The variable cost of producing a compact disc is:

- A £100
- B £8
- C £7
- D £7.50
- E £5

13 If the company produces 500 compact discs and wanted to make a £1400 profit from their sale, the price of each disc must be:

- A £5
- B £10
- C £2.80
- D £7.20
- E £4.40

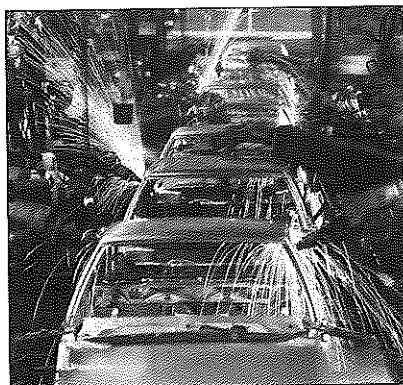
14 If a firm doubles all its factor inputs of land, labour and capital, and output more than doubles, we can say the firm has experienced:

- A Constant returns to scale.
- B Diminishing returns to labour.
- C Economies of scale.
- D Decreasing returns to scale.
- E Increasing returns to scale.

## DATA RESPONSE 1



A



B



C

1 The business organizations producing the goods and services in the photographs above have different motives for their productive activities. For each one suggest what their most important aim is likely to be. (3 marks)